NetComm®
NETWORKING & COMMUNICATIONS CONVERGED

SMALL-MEDIUM BUSINESS
10/100 ETHERNET ADSL MODEM/ROUTER

NB1300 ADSL Modem

Quick Start Guide

Contents

Introduction 3
- Which configuration is best? 3
- Package Contents 4
- Factory Defaults 4
- Do I need a Micro filter? 5

Ethernet Gateway Configuration 6
- Step 1: Connecting your computer to the NB1300 6
- Step 2: Configuring the NB1300 7
- Step 3: Configuring your Computer to use the NB1300 9

Ethernet Modem (Bridge) Configuration 10
- Step 1: Connecting your computer to the NB1300 10
- Step 2: Configuring the NB1300 11
- Step 3: Configuring your Computer/Router to use the NB1300 12

USB Gateway (Router) Configuration 13
- Step 1: Connecting your computer to the NB1300 13
- Step 2: Configuring the NB1300 14
- Step 3: Configuring your Computer to use the NB1300 15

Trouble Shooting 16
- Resetting the NB1300 ADSL Modem 16

Registering your NetComm Product 16
- Contact Information 16
- Trademarks and Notices 16
- Warranty Registration Form 17
- Product Warranty 19
- Limitations of Warranty 19

Introduction

This guide is supplied to help you connect your NB1300 ADSL Modem quickly to your network or Windows computer.

If the NB1300 has already been used, we strongly recommend you reset and flush all settings of the unit via the USB cable by pressing and holding the RESET button on the rear of the modem for 10 seconds. Wait for the **RDY** light to begin pulsing before continuing.

Note: Please be aware that connection via USB is only supported in Windows 98SE, Windows Me, Windows 2000 and Windows XP. For Windows 95, NT, Linux and Macintosh you should use the Ethernet port of your NB1300.

Which configuration is best?

Your NB1300 ADSL Modem can be connected and configured in various ways, below is a description of the most common modes of operation.

Ethernet Gateway (Router) - This is when the NB1300 is connected to your network switch or hub and shares the Internet connection to all computers on the network. The NB1300 will log on to your ISP on behalf of your computers and it will shield your computers from direct Internet attack by using Network address Translation (NAT).

Ethernet Modem (Bridge) - This is when you plug the modem directly into the Ethernet port of just one computer or another router (via a cross over Ethernet cable) you then must run Internet connection software (often supplied by your ISP) on the computer or second router to establish a connection to the Internet. This method means that the computer or router connected to the Ethernet port of the NB1300 is exposed to the Internet and is given a public IP address.

USB Gateway (Router) - If you do not have an Ethernet port on your computer you can use your USB port like an Ethernet port to connect to the NB1300. This "simulated" Ethernet port is only for connecting to the NB1300 and is only available for Windows 98SE, Windows 2000 and Windows XP. The NB1300 will log on to your ISP on behalf of your computer and it will shield your computer from Internet attack by using NAT. Note that the USB cable is not supplied with the NB1300.

If you wish to configure the NB1300 in a different way to the examples above you should consult a Network Specialist for more information.

*Note: We recommend you change your Router's password from the factory default **before** connecting it to a network or the Internet. Refer to the "Admin Password" section in the "Security" Menu.*

This unit should only be connected to the Telecommunications Network through a line cord which meets the requirements of ACA TS008.

Package Contents

The following items should be contained in your NB1300 ADSL Modem Package:

- Quick Start Guide
- ADSL Modem (NB1300)
- Power adaptor (12V AC / 1Amp)
- Telephone line cable (RJ11)
- Crossover network cable (RJ45)
- NetComm Communications CD-ROM (CRS767)
- USB Cable

Factory Defaults

The following table lists the Factory Defaults of your NB1300 ADSL Modem:

Field	Setting Details
LAN IP address:	192.168.1.1
LAN Subnet Mask:	255.255.255.0
DHCP Server:	Enabled (pool 192.168.1.100 - 192.168.1.149)
User Name:	admin
Password:	password
Main Function:	Router (Bridge Disabled)
WAN connection type:	PPPoE LLC
VPI:	8
VCI:	35

Note: These defaults may change with firmware updates and factory changes please consult the NetComm website to check for the latest defaults.

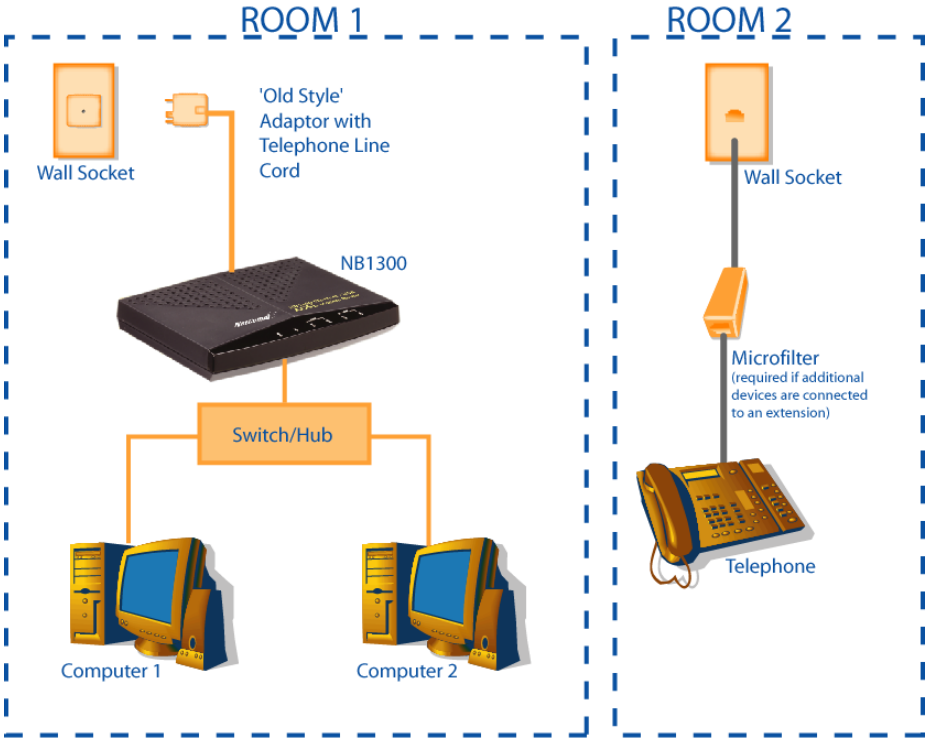
Do I need a Micro filter?

Micro filters are used to prevent common telephone equipment, such as phones, answering machines and fax machines, from interfering with your ADSL service. If your ADSL enabled phone line is being used with any other equipment other than your ADSL Modem then you will need to use one Micro filter for each phone device.

Splitters may be installed when your ADSL line is installed or when your current phone line is upgraded to ADSL. If your telephone line is already split you will not need to use a Microfilter - check with your ADSL service provider if you are unsure.

Each micro filter is connected in-line with your telephone or fax machine so that all signals pass through it. Telephones and/or facsimiles in other rooms that are using the same extension will also require Microfilters. The following diagram gives an example of connecting your ADSL Modem/Router using a Microfilter.

A suitable Microfilter can be purchased from NetComm or your Service Provider, if required.



Ethernet Gateway Configuration

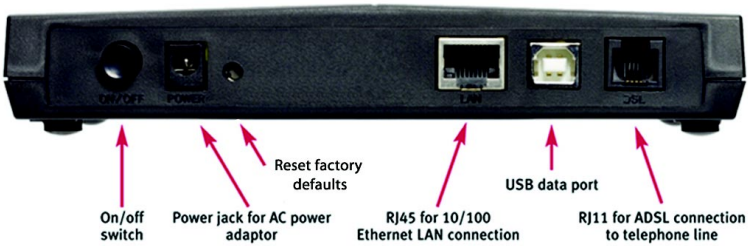
Before continuing, ensure you have the following items and information ready:

- A Windows 98, ME, NT, 2000 or XP client machine with a Network Interface Card installed.
- Either a Network Hub and two UTP cables OR one Crossover UTP cable.
- A telephone line with ADSL service enabled.
- User Name, Password, VPI, VCI, encapsulation and DNS server settings for your ADSL account (ask your ISP if unsure) .

Note: The following procedure presumes your NB1300 is set to a factory default IP address 192.168.1.1.

Step 1: Connecting your computer to the NB1300

- Using either a hub and two UTP cables, or just one crossover UTP cable, connect the NB1300 Modem Router to your computer.



- Connect one end of the ADSL phone line to the NB1300 ADSL Modem and the other end to the wall socket.
- Connect the power pack to the NB1300 ADSL Modem and switch on the power switch.
- Ensure that there is a LAN link light on the NB1300.
- Ensure that the computer you intend to use has an IP address in the same subnet as the NB1300 ADSL Modem. (e.g. the NB1300's default IP is 192.168.1.1 - your computer should be on 192.168.1.100 or similar.) If you have DHCP enabled on your computer, the NB1300 will assign your computer a suitable IP address.
- Ensure that your computer has a LAN link light.

Step 2: Configuring the NB1300

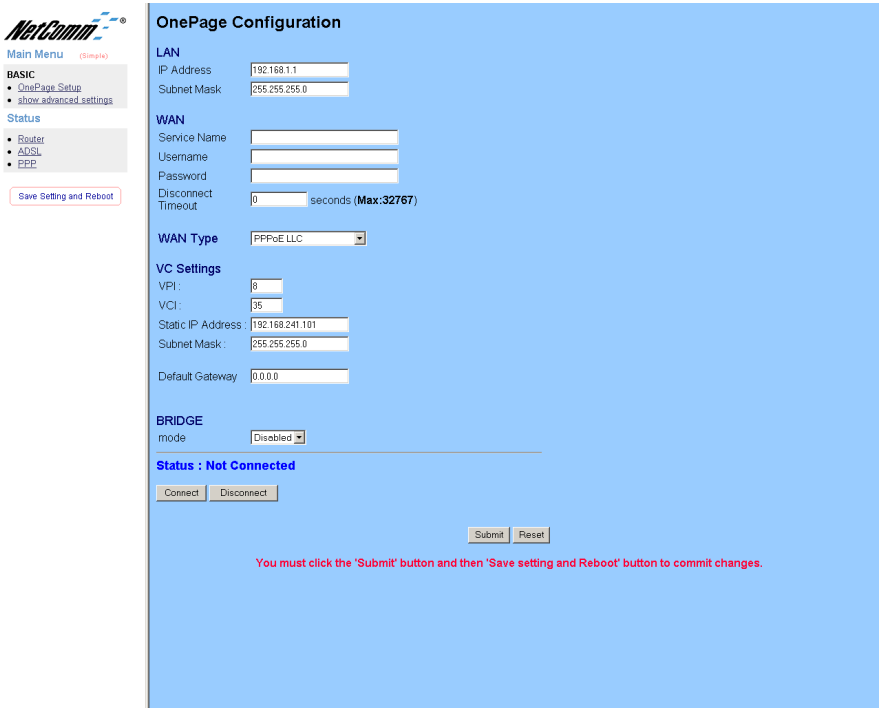
1. After connecting all the ADSL Router cables, powering on the ADSL Router, and launching a web browser, such as Internet Explorer or Netscape Navigator, browse to the address http://192.168.1.1.

2. Enter the correct user name and password to access the Configuration tool. The default user name and password are as below.

   User Name : admin
   Password : password

*Note: You must click the **Submit** button on every page that you make changes on and when you have made all your changes click the **Save Setting and Reboot** button from the bottom of the menu.*

3. Click on the **One Page Setup** link under the **Basic menu**. You do not need to change the LAN settings unless you need the NB1300 to work with an existing network on a subnet other than 192.168.1.x.



You will need to Change your WAN and VC settings as provided by your ISP. The following lists an example of the most common ISP settings used in Australia. The fields that require changing from the default settings are highlighted.

Field	Setting Details
Service name:	Any name to describe your ISP
User Name:	Your ISP will provide a case sensitive **User Name** in a format similar to your email address. Contact your ISP for details
Password:	Enter your **Password** as supplied by your Service Provider (characters are usually all lower case)
Disconnect timeout:	0 ❖
Mode/Wan Connection Type:	PPPoE LLC or PPPoA
VPI:	8 ❖
VCI:	35 ❖
Static IP Address:	192.168.241.101 ❖
Subnet Mask:	255.255.255.0 ❖
Default Gateway:	0.0.0.0 ❖
Bridge mode:	Disabled ❖

❖ ***Default Setting.*** *Although in most cases you will not be required to alter these default settings for your NB1300, your ISP may identify specific settings to enable connection to their service. Please refer to your ISP or Network Administrator for further information.*

4. Click **Submit** and then click the **Save Setting and Reboot** button from the bottom of the menu. Wait for the configuration to complete.

   Standard configuration of your NetComm NB1300 ADSL Modem is now complete. You should be able to access the Internet through the unit, when it is set to be your gateway on your computer/s. Refer to Step 3 for more information.

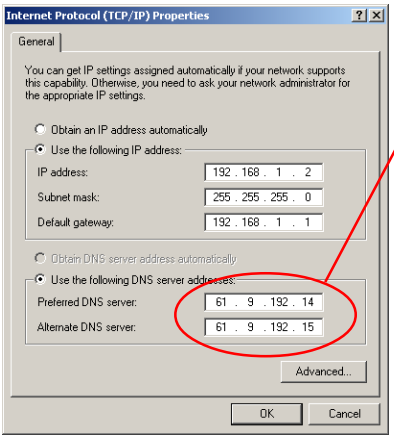
Step 3: Configuring your Computer to use the NB1300

To use the NB1300 ADSL Modem to access the Internet, your computer must have an IP Address that is in the same LAN subnet as the NB1300 ADSL Router and use the NB1300 ADSL Router's IP address as its gateway.

Most applications call for the Primary and Secondary DNS server entries to be made on each computer. These can be automatically assigned by another DHCP server or by enabling the DHCP server on the NB1300 ADSL Modem, and entering the DNS values in the DNS section of the NB1300.

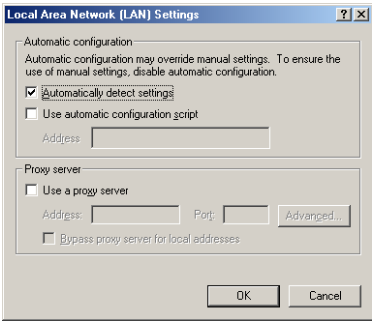
The following example shows how a computer could be set up when the NB1300 ADSL Modem is configured with no DHCP service for this example. The NB1300 ADSL Modem would be set to a LAN IP Address (Gateway) of 192.168.1.1 with a Subnet Mask of 255.255.255.0

Open the **Control Panel** and double click on the **Network** icon. Scroll down to select **TCP/IP-> *Ethernet Card*** and click on the **Properties** button.



Your DNS numbers are specific to your ISP and should be notified along with your User Name and Password.

Note: When using Internet Explorer as a web browser, click on the "Tools" menu and select "Internet Options". Select the "Connections" tab and click on the "LAN Settings" button. Tick the "Automatically detect settings" checkbox and make sure the "Use a Proxy server" checkbox is unchecked.



Ethernet Modem (Bridge) Configuration

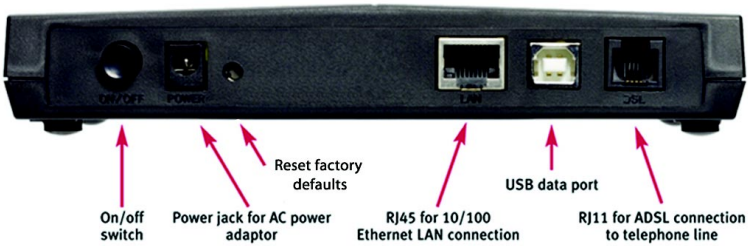
Before continuing, ensure you have the following items and information ready:

- A computer with a Network Interface Card installed or a router (such as the NetComm NB3100).
- A Crossover UTP cable.
- A telephone line with ADSL service enabled.
- User Name, Password, VPI, VCI, encapsulation and DNS server settings for your ADSL account (ask your ISP if unsure). These are not needed for the NB1300, but are required for the computer or router that it will be connected to.

Note: The following procedure presumes your NB1300 is set to a factory default IP address 192.168.1.1.

Step 1: Connecting your computer to the NB1300

- Using a Crossover network cable, connect the Ethernet port of the NB1300 into the Ethernet port of the computer you wish to use to configure the unit.



- Connect the power and switch the NB1300 on.
- Ensure the LAN link on the NB1300 is active.
- Configure your Computer to use any IP address in the range of 192.168.1.2 to 192.168.1.254.

Note: When the NB1300 is used in Bridge mode it is a fairly passive device and most Internet configuration required (such as User Name, Password, etc.) is done on the computer or another router.

Step 2: Configuring the NB1300

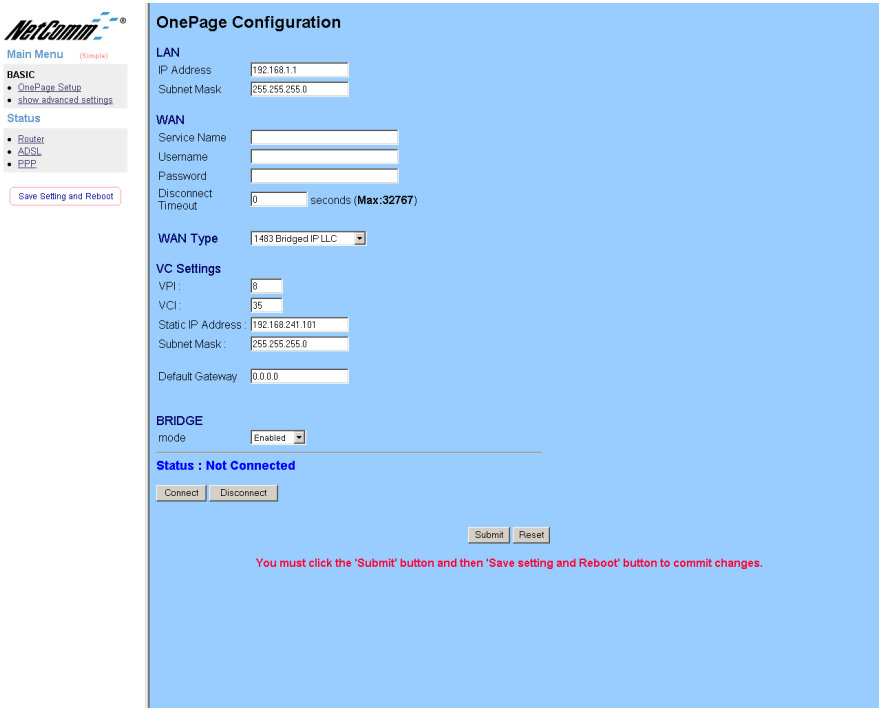
1. After connecting all the ADSL Router cables, powering on the ADSL Router, and launching a web browser, such as Internet Explorer or Netscape Navigator, browse to the address http://192.168.1.1.

2. Enter the correct user name and password to access the Configuration tool. The default user name and password are as below.

   User Name : admin
   Password : password

*Note: You must click the **Submit** button on every page that you make changes on and when you have made all your changes click the **Save Setting and Reboot** button from the bottom of the menu.*

3. Click on the **One Page Setup** link under the **Basic menu**.



You will need to Change your WAN and VC settings as provided by your ISP. The following lists an example of the most common ISP settings used in Australia. The fields that require changing from the default settings are highlighted.

Field	Setting Details
Service name:	*Blank* ❖
User Name:	*Blank* ❖
Password:	*Blank* ❖
Disconnect timeout:	0 ❖
Mode/Wan Connection Type:	1483 Bridged IP LLC
VPI:	8 ❖
VCI:	35 ❖
Static IP Address:	192.168.241.101 ❖
Subnet Mask:	255.255.255.0 ❖
Default Gateway:	0.0.0.0 ❖
Bridge mode:	Enabled

❖ ***Default Setting.*** *Although in most cases you will not be required to alter these default settings for your NB1300, your ISP may identify specific settings to enable connection to their service. Please refer to your ISP or Network Administrator for further information.*

4. Click **Submit** and then click the **Save Setting and Reboot** button from the bottom of the menu. Wait for the configuration to complete.

Step 3: Configuring your Computer/Router to use the NB1300

ISP Software Method

Install software on your computer (usually provided by your ISP) and enter a User Name and Password. This software usually adds a PPP service to your computer.

Please refer to your ISP for more information on how to configure your software to work with the NB1300 ADSL Modem when used as a bridge.

Second Router Method

If you are using a *second* router in conjunction with the NB1300 as a Bridge, you should unplug the NB1300 from the computer and plug the NB1300 into the secondary router. Consult the second router's documentation for information on how to configure your user name and password.

Note: Depending on the second router, you may need to use a "straight through" UTP cable instead of a "crossover" UTP cable to join the NB1300 to the WAN port of the other router.

USB Gateway (Router) Configuration

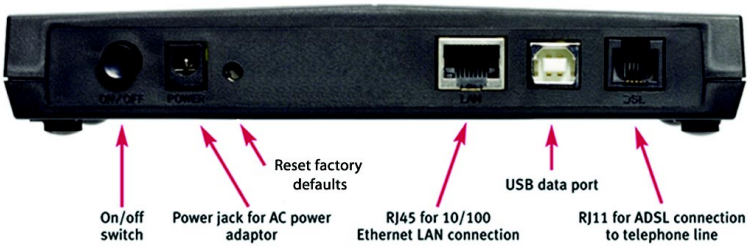
Before continuing, ensure you have the following items and information ready:

- A Windows 98SE, ME, 2000 or XP client machine.
- A telephone line with ADSL service enabled.
- User Name, Password, VPI, VCI, encapsulation and DNS server settings for your ADSL account (ask your ISP if unsure).

Note: Please be aware that connection via USB is only supported in Windows 98SE, Windows Me, Windows 2000 and Windows XP. For Windows 95, NT, Linux and Macintosh you should use the Ethernet port of your NB1300.

Step 1: Connecting your computer to the NB1300

1. Place the CD-ROM provided into your CD-ROM drive.
2. Connect the USB cable from the NB1300 into a spare USB port on your computer.



3. Windows will detect the new hardware and launch a New hardware Wizard. When prompted to search for drivers choose “Specify location”.
4. Browse the drive letter of your CD-ROM drive and locate the “USB driver” folder. E.g. **D:\USB driver** where D: is the drive letter of your CD-ROM.
5. Continue with the driver search by clicking **OK** and the Found Hardware Wizard will locate the USB driver and prompt you to install it.
6. Once the driver is installed, it is configurable as a regular Ethernet adapter and will be set to automatically accept an IP address from the NB1300. You can manually set its IP address to any free address in the range of 192.168.1.2 –254 as required.

Note: You may be asked if you wish to continue with out a digital signature if so choose YES to continue. This request may occur up to four (4) times depending on your operating system.

Step 2: Configuring the NB1300

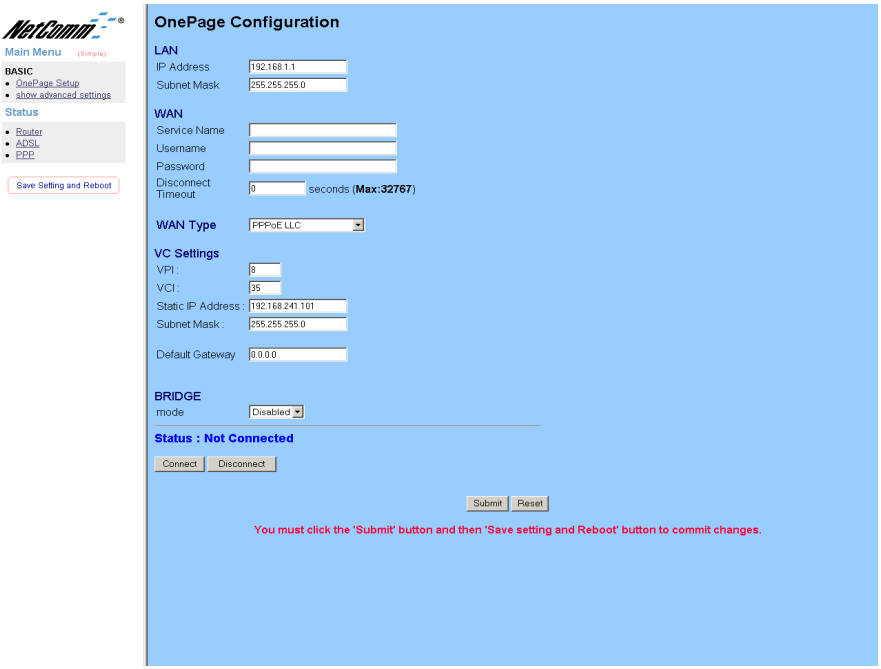
1. After connecting all the ADSL Router cables, powering on the ADSL Router, and launching a web browser, such as Internet Explorer or Netscape Navigator, browse to the address http://192.168.1.1.

2. Enter the correct user name and password to access the Configuration tool. The default user name and password are as below.

   User Name : admin
   Password : password

*Note: You must click the **Submit** button on every page that you make changes on and when you have made all your changes click the **Save Setting and Reboot** button from the bottom of the menu.*

3. Click on the **One Page Setup** link under the **Basic menu**. You do not need to change the LAN settings unless you need the NB1300 to work with an existing network on a subnet other than 192.168.1.x.



You will need to Change your WAN and VC settings as provided by your ISP. The following lists an example of the most common ISP settings used in Australia. The fields that require changing from the default settings are highlighted.

Field	Setting Details
Service name:	Any name to describe your ISP.
User Name:	Your ISP will provide a case sensitive **User Name** in a format similar to your email address. Contact your ISP for details.
Password:	Enter your **Password** as supplied by your Service Provider (characters are usually all lower case).
Disconnect timeout:	0 ❖
Mode/Wan Connection Type:	PPPoE LLC or PPPoA
VPI:	8 ❖
VCI:	35 ❖
Static IP Address:	192.168.241.101❖
Subnet Mask:	255.255.255.0❖
Default Gateway:	0.0.0.0 ❖
Bridge mode:	Disabled ❖

❖ ***Default Setting.*** *Although in most cases you will not be required to alter these default settings for your NB1300, your ISP may identify specific settings to enable connection to their service. Please refer to your ISP or Network Administrator for further information.*

4. Click **Submit** and then click the **Save Setting and Reboot** button from the bottom of the menu. Wait for the configuration to complete.

Step 3: Configuring your Computer to use the NB1300

Most applications call for the Primary and Secondary DNS server entries to be made on each computer. These can be automatically assigned by another DHCP server or by enabling the DHCP server on the NB1300 ADSL Modem, and entering the DNS values in the DNS section of the NB1300.

Trouble Shooting

Resetting the NB1300 ADSL Modem

When the Ethernet cable cannot be used due to an unknown or inaccessible IP address, you will need to reset the NB1300 ADSL Modem to its factory defaults. To reset the ADSL Modem to its factory defaults, use a ballpoint pen to press and hold the RESET button for 10 seconds. Wait 30 seconds for the NB1300 ADSL Modem to reboot. The NB1300 ADSL Modem will now have the default settings, including its default IP address of 192.168.1.1 and default passwords

Registering your NetComm Product

To ensure that the conditions of your warranty are complied with, please go to the NetComm web site for quick and easy registration of your product at

www.netcomm.com.au

Alternatively, you can use a copy of the Warranty Registration Form on the following page and mail it to NetComm Limited, PO Box 1200, Lane Cove NSW 2066.

Contact Information

If you have any technical difficulties with your product, please do not hesitate to contact NetComm's Customer Support Department.

Email: support@netcomm.com.au

Fax: (02) 9424-2010

Web: www.netcomm.com.au

Trademarks and Notices

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Please note that the images used in this document may vary slightly from those of the actual product. Specifications are accurate at the time of the preparation of this document but are subject to change without notice.

Cut along the line

Warranty Registration Form

Date of Purchase .....

Name .....

Company .....

Address .....

..... Post Code .....

Tel No ( ) ..... Fax No ( ) .....

E-mail .....

The following information is vital for your warranty

Please make sure it's correct and complete.

Serial No .....

Model .....

Product Type:

- ☐ PC Card
- ☐ External
- ☐ Internal
- ☐ Other

! Make sure you fill this section in!

I intend to use this device at:

- ☐ Home
- ☐ School/College/University
- ☐ Business
- ☐ Government Office

Dealer's Name .....

Dealer's Address .....

..... Post Code .....

Tel No ( ) ..... Fax No ( ) .....

How did you find out about our products?

.....

.....

Product Warranty

The warranty is granted on the following conditions:

1. This warranty extends to the original purchaser (you) and is not transferable;
2. This warranty shall not apply to software programs, batteries, power supplies, cables or other accessories supplied in or with the product;
3. The customer complies with all of the terms of any relevant agreement with NetComm and any other reasonable requirements of NetComm including producing such evidence of purchase as NetComm may require;
4. The cost of transporting product to and from NetComm's nominated premises is your responsibility; and,
5. NetComm does not have any liability or responsibility under this warranty where any cost, loss, injury or damage of any kind, whether direct, indirect, consequential, incidental or otherwise arises out of events beyond NetComm's reasonable control. This includes but is not limited to: acts of God, war, riot, embargoes, acts of civil or military authorities, fire, floods, electricity outages, lightning, power surges, or shortages of materials or labour.
6. The customer is responsible for the security of their computer and network at all times. Security features may be disabled within the factory default settings. NetComm recommends that you enable these features to enhance your security.

The warranty is automatically voided if:

1. You, or someone else, use the product, or attempts to use it, other than as specified by NetComm;
2. The fault or defect in your product is the result of a voltage surge subjected to the product either by the way of power supply or communication line, whether caused by thunderstorm activity or any other cause(s);
3. The fault is the result of accidental damage or damage in transit, including but not limited to liquid spillage;
4. Your product has been used for any purposes other than that for which it is sold, or in any way other than in strict accordance with the user manual supplied;
5. Your product has been repaired or modified or attempted to be repaired or modified, other than by a qualified person at a service centre authorised by NetComm; and,
6. The serial number has been defaced or altered in any way or if the serial number plate has been removed.

Limitations of Warranty

The Trade Practices Act 1974 and corresponding State and Territory Fair Trading Acts or legalisation of another Government ("the relevant acts") in certain circumstances imply mandatory conditions and warranties which cannot be excluded. This warranty is in addition to and not in replacement for such conditions and warranties.

To the extent permitted by the Relevant Acts, in relation to your product and any other materials provided with the product ("the Goods") the liability of NetComm under the Relevant Acts is limited to, at the option of NetComm to:

- Replacement of the Goods; or
- Repair of the Goods; or
- Payment of the cost of replacing the Goods; or
- Payment of the cost of having the Goods repaired.

All NetComm ACN 002 490 486 products have a standard 12 months warranty from date of purchase. However some products have an extended warranty option (refer to packaging). To be eligible for the extended warranty you must supply the requested warranty information to NetComm within 30 days of the original purchase by registering on-line via the NetComm web site at www.netcomm.com.au.

NetComm reserves the right to request proof of purchase upon any warranty claim.

NetComm®

NETWORKING & COMMUNICATIONS CONVERGED

SMALL-MEDIUM BUSINESS

10/100 ETHERNET ADSL MODEM/ROUTER

NB1300 ADSL Modem

CONNECT AND SHARE A HIGH-SPEED ADSL CONNECTION

The NB1300 opens the world of affordable, high-speed Internet access for your home or office network. ADSL is here – wait no longer.

E-MAIL AND INTERNET – INSTANTLY

Now you can enjoy the Internet and email at high speeds up to 100 times faster than a 56K modem. And with the Always On service of ADSL, email and the Internet are at your fingertips – all day, every day. Now every office can enjoy the cost-savings and productivity benefits of instant email and Internet access.

EASY TO SET UP, YET FULLY FEATURED

The NB1300 is fully compatible with and ready for all major Australian ISPs, so it's simple, straightforward and quick to set up. The NB1300 is also fully featured, so that the advanced user can deploy special applications such as Static IP and bridging.

USE YOUR EXISTING TELEPHONE LINE

ADSL uses a single ordinary telephone line, so there are no new cables or special lines to install. Better still, you can continue to use the phone line for voice or fax even after ADSL is installed (you must install a microfilter or Pots Splitter to utilise your ADSL line for telephone functions).

SHARE A SINGLE ADSL CONNECTION

Your entire network can enjoy fast ADSL access via a single ADSL connection using the integrated NAT routing functions.

SECURE NAT/PAT & DHCP FUNCTIONS

The NB1300 acts as a comprehensive router, employing NAT/PAT (network/port address translation) and DHCP allocation of IP addresses to protect your network from Internet attack.

OPERATING SYSTEM INDEPENDENT

NB1300 is designed to work with a wide range of operating systems such as Windows® 95*/98/ME/NT*/2000/XP, Apple Macintosh*, Linux* and any system running TCP/IP*.

* USB is not supported in these Operating Systems.

On/off switch

Power jack for AC power adaptor

RJ45 for 10/100 Ethernet LAN connection

USB data port

RJ11 for ADSL connection to telephone line

3 YEAR WARRANTY*

1 year warranty out of the box.
Extra 2 years **FREE** with online registration at www.netcomm.com.au

* Conditional upon registration online.

NetComm is Australia's dynamic data communications and networking solutions provider. For more information on this and other NetComm products, please visit www.netcomm.com.au

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www.netcomm.com.au

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